

VINYL CHLORIDE MONOMER

PRICES: U.S.: September: 23 cts/lb del; Spot: 27 cts-29 cts/lb.

EUROPE: Third-quarter contract: \$620/m.t. del.

ASIA/PACIFIC: Third-quarter contract: \$730/m.t. del.

OUTLOOK: Vinyl chloride monomer (VCM) markets have been extremely tight this year, with strong demand—particularly from the Far East—driving prices up. August VCM prices stood at 23 cts/lb, up from 17 cts/lb in January.

VCM producers are running at or near capacity; polyvinyl chloride (PVC), which takes 98% of VCM production, is selling at record levels, and inventories are dropping to five-year lows. Dow Chemical is expected to start up a 700-million lbs/year plant at Oyster Creek, TX sometime this month.

The next round of U.S. VCM capacity expansions is not scheduled until early 1996. Geon will increase production at its LaPorte, TX plant by 50%—or 800 million lbs/year. Oxymer has also said it will expand capacity from 1.5 billion lbs/year to 1.8 billion year.

Growth rates for VCM during the next few years are estimated at 5%. While PVC downstream end markets such as housing, construction, automobiles, and appliances are expected to continue growing worldwide, green pressure on chlorine products is expected to temper VCM growth as the use of recycled PVC increases.

TECHNOLOGY: VCM is made by the pyrolysis of ethylene dichloride. While top producers have proprietary processes, engineering firms such as Uhde also offer VCM technology—some on their own and some from the top producers, notably Geon, Mitsui Toatsu, and Hoechst.

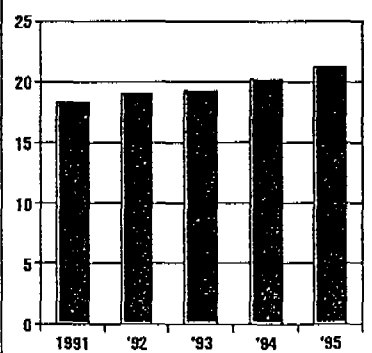
(in thousands of m.t./year)

	Capacity		Capacity
NORTH AMERICA		ICI	320
U.S.		Solvay Polymere	23
Borden Chemicals and Plastics	410	Wacker-Chemie	225
Dow Chemical	1,320	ITALY	
Formosa Plastics	910	European Vinyls Corp. (EVC)	
Geon	365	(ICI-EniChem)	700
Georgia Gulf	550	THE NETHERLANDS	
OxyChem	550	ROVIN	475
Oxymar	635	NORWAY	
PPG Industries	330	Norsk Hydro	450
Vista Chemical	375	SPAIN	
Westlake Monomers	450	Aiscondel	150
CANADA		Viniclor (EVC-Atochem-Solvay)	250
Dow	370	SWEDEN	
MEXICO		Norsk Hydro	110
Petroleos Mexicanos	270	U.K.	
SOUTH AMERICA		European Vinyls Corp.	400
ARGENTINA			
Indupa	50	ASIA/PACIFIC	
Monomero Vinilicos	160	INDONESIA	
Electrochlor	33	Asahimas Subentra Chemical	150
BRAZIL		JAPAN	
CPC	400	Chiba VCM	
Solvay	160	(Sumitomo-Denki Kagaku-Asahi Glass)	210
COLOMBIA	16	Kaneka	430
PERU	8	Kashima VCM	
VENEZUELA		(Asahi Glass and Mitsubishi Corp.)	420
Pequiven	50	Mitsubishi Kasei	280
		Mitsui Toatsu	98
WESTERN EUROPE		Sanyo Monomer	230
BELGIUM		Sun Arrow Chemical	180
BASF	160	Tosoh Corp.	465
Limburgse Vinyl Maatschappij	520	Other	136
Solvic	220	SOUTH KOREA	
FRANCE		Han Yang Chemical	470
Elf Atochem	250	Lucky	210
Société de Chlorure de Vinyl de Fos		PHILIPPINES	7
(60% Shell Chimie; 40% Elf Atochem)	350	TAIWAN	
Solvay SA	270	Formosa Plastics	720
GERMANY		Taiwan VCM	420
BASF	100	THAILAND	
Hoechst	260	Thai Plastic & Chemical	140
Huls	360		

Sources: SRI International (Menlo Park, CA); CW.

WORLDWIDE DEMAND

(in millions of m.t.)



Sources: CMAI (Houston) CW

MAJOR CUSTOMERS

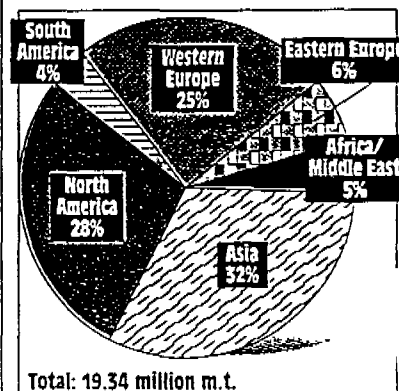
U.S.
Shintech (Houston)
OxyChem (Dallas)
Geon (Cleveland)
Vista Chemical (Houston)

Europe
Shell Chimie (France)
Buna (Germany)

Asia/Pacific
China General Plastics (Taiwan)
Nippon PVC (Japan)
Shin-Etsu (Japan)

Source: CW.

DEMAND BY REGION



Total: 19.34 million m.t.

Source: CMAI (Houston)